

Supercharged Digital Collections: Moving to the fast lane with scalable open source infrastructure



Photos from University of Utah, Multimedia Archives Photo Collection, Gary Dean Brown

Presenters

Anna Neatrou

Brian McBride

Matt Brunsvik

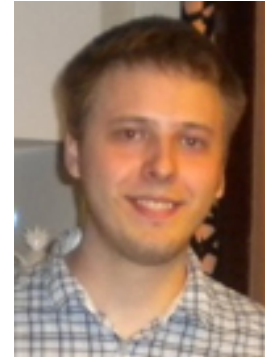
Harish Maringanti

Other

Presenters/contributors:



Jeremy Myntti



Alan Witkowski

What we'll cover today

- ▶ History
- ▶ SIMP demo
- ▶ Migration
- ▶ Lessons learned

The screenshot displays the library's digital archive interface. At the top, there's a navigation bar with 'Home', 'Browse All', 'Ask a Question', 'Log in', 'Favorites', and 'Help'. A search bar is present with a 'Search' button and a 'within results' dropdown. A blue banner prompts users to 'Please take a moment to fill out our survey'.

The main content area is titled 'Browsing items in: Univ of Utah - Multimedia Archives Photographs' with 18000 results. It includes sorting options (Sort by: Title, Display Options, Save to favorites) and a display count of 100. A 'Narrow your search by:' sidebar on the left lists filters for Type, Creator, Keywords, Date, and Title.

Below the sidebar, there are thumbnail images and titles for items like 'Geodesic Dome', 'Walter Walrus', and '#10 Springs gully, 1979'. A 'Limit your search' section on the right allows filtering by Type, Format, and Collection Name.

The bottom section shows a list of search results with columns for Title, Collection Number And Name, and Photo Number. The results include:

Title	Collection Number And Name	Photo Number
"1800 Reward" poster of capture of polygamists John Taylor and George A. Cannon.	P006 Church of Jesus Christ of Latter-day Series History Photograph Collection	P006v01_01_07
"...one of the deepest cuts in the world" in Cataract Canyon, about ten miles below the Green River.	P1049 Harriet Herbert Leitch Photograph Collection	P1049n1_11_43
"1207 Crystal Avenue, the home that we built and moved into October 13, 1923, saved and lived together in for 26 years. Two years later I moved into the home Mel, Irma, son, and I had built at 1965 St. Marys Drive."	P1113 Grace Richards Warner Photograph Collection	P1113n192

History of UU Marriott Digital Library

2001

Launched
ContentDM



History of UU Marriott Digital Library

2002

Launched Utah
Digital Newspapers
(UDN)



History of UU Marriott Digital Library

2003

UDN receives IMLS
NLG grant



History of UU Marriott Digital Library

2010

UDN reaches 1
Million pages
milestone



History of UU Marriott Digital Library

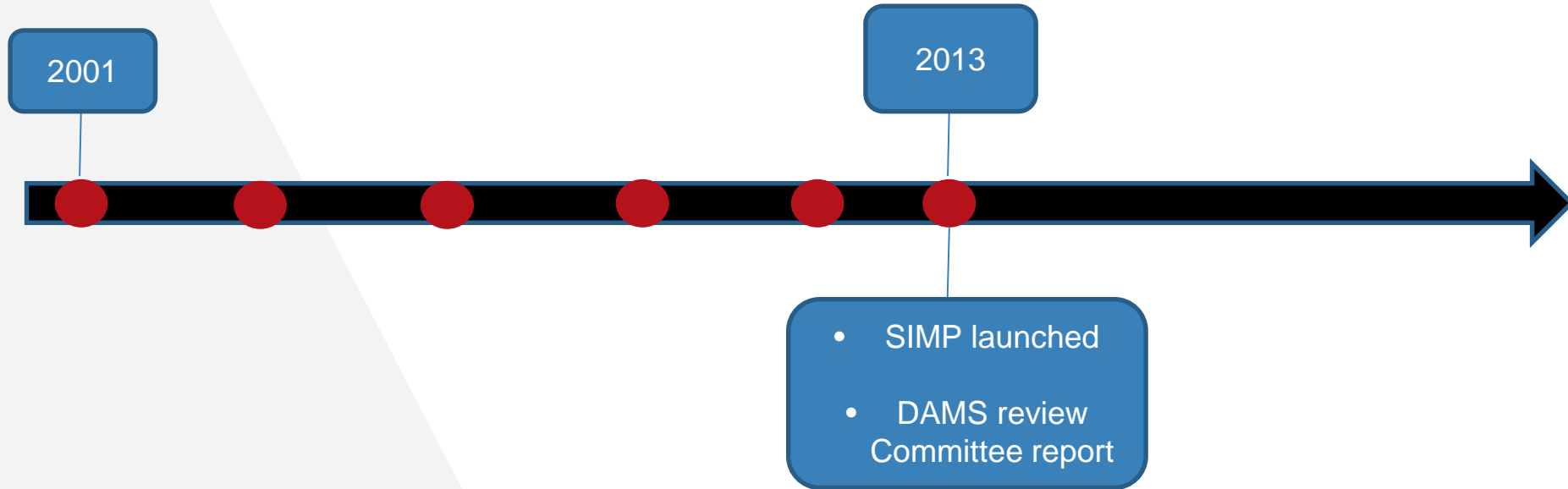
2001

2012

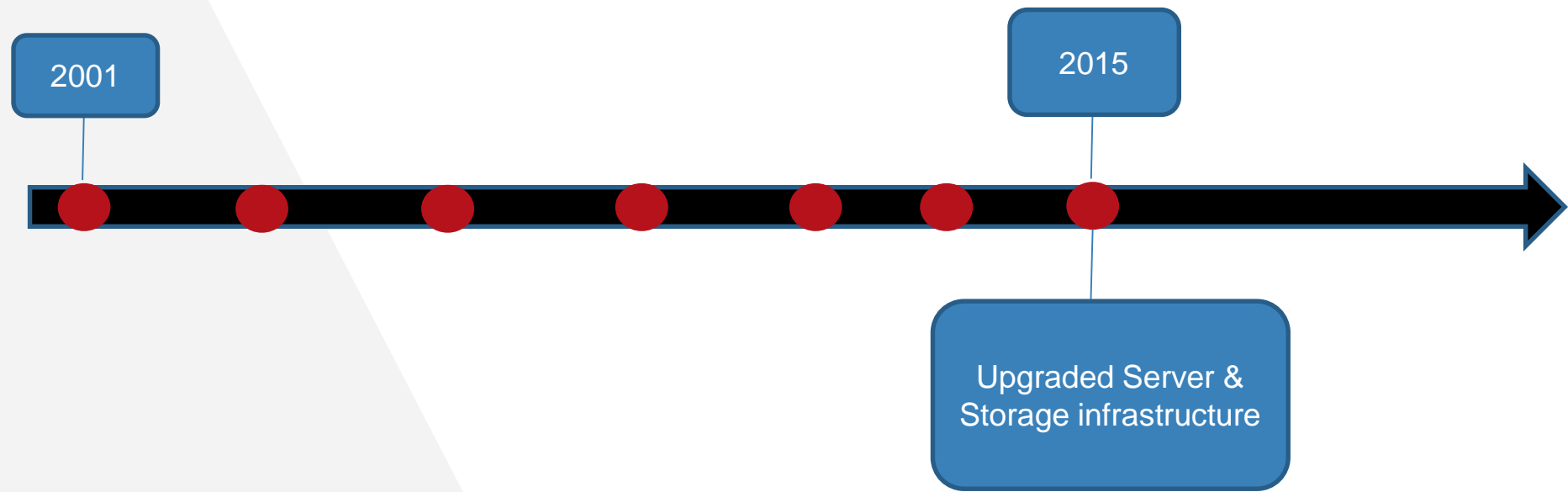
- Purchased Rosetta for long term archiving
- SIMP development started



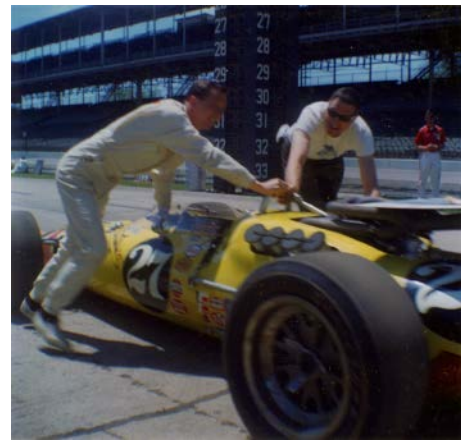
History of UU Marriott Digital Library



History of UU Marriott Digital Library



History of UU Marriott Digital Library

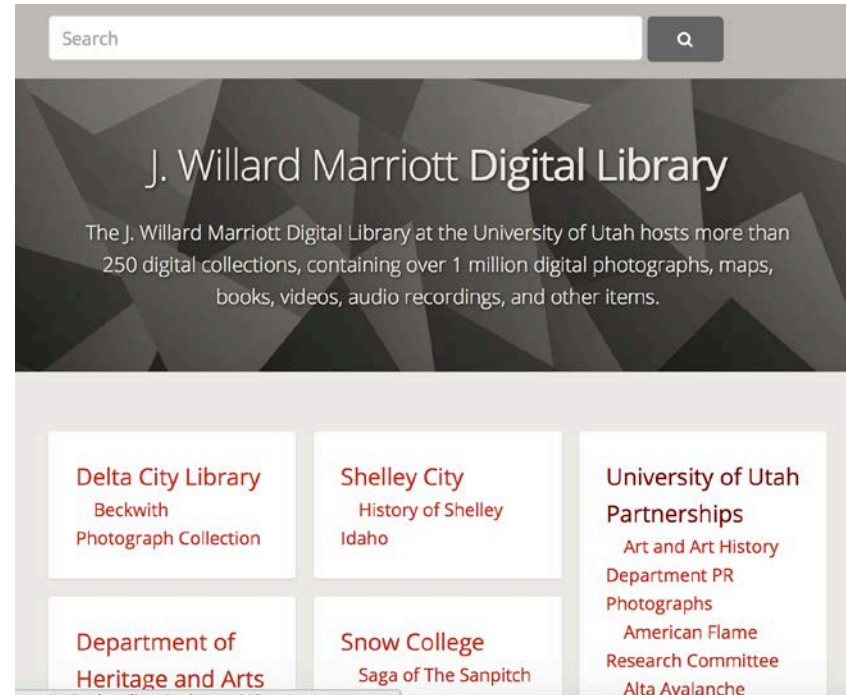


UDN migrated (Jan – June)

All Other digital Collections migrated (June – Dec)

Marriott Library Digital Collections

- ▶ 269 collections
- ▶ 717,858 IEs (items)
- ▶ 139,583 compound objects
- ▶ 12 file types
(images, videos, pdfs...)
- ▶ 3 TB storage
- ▶ Over 50 partners (internal and external) hosting collections with the Marriott Library



<https://collections.lib.utah.edu/>

Utah Digital Newspapers (UDN)

- ▶ ~1.926 Million pages
- ▶ ~21.64 Million articles
- ▶ ~138 Newspaper titles
- ▶ Article level newspaper data
- ▶ Many unique papers not in Chronicling America

The screenshot shows the Utah Digital Newspapers website. At the top, the title "Utah Digital Newspapers" is displayed in a large, serif font, with the subtitle "Creating Citizen Historians" below it. A navigation bar contains links for "Home", "Browse by County", "Newspaper Holdings", "Utah Newspaper Hall of Fame", and "Contact".

The main content area is divided into several sections:

- Search All Newspapers:** A search bar with a "Go ?" button.
- Search/Browse a Newspaper:** A dropdown menu labeled "Select Newspaper:".
- Recent Additions:** A list of newspaper titles and their active years:
 - [The Beaver County News](#) 1957-1981
 - [The Milford News](#) 1947-1956
 - [Iron County record](#) 1979-1982
 - [The Springville Herald](#) 1964-1969
 - [Utah Daily Chronicle](#) 1963-1972
 - [Davis County Clipper](#) 1988-1992
- In the News:** A section featuring a "familytree magazine" logo.
- Featured Title:** A preview of a newspaper clipping from the "Manti Messenger" with the headline "Manti Kills Fatted Calf". Below the clipping is a caption: "Click on the image to go to this issue."
 - Help Us Improve:** A request for feedback with a link to an "online survey".
 - Help:** Links for "About the Program" and "How to Use this Website".

At the bottom of the page, there is a footer that reads "75 Best Websites for US State Genealogy Research in 2015".

<https://digitalnewspapers.org/>

SIMP Tool for metadata management

- ▶ Initially designed to facilitate management between CONTENTdm and Rosetta, our preservation system
- ▶ Platform agnostic and modular, provides ability to use other DAMs/Preservation Systems
- ▶ Options for automatically extracting some metadata (format, OCR text)
- ▶ Updated in 2016 to support Solphal

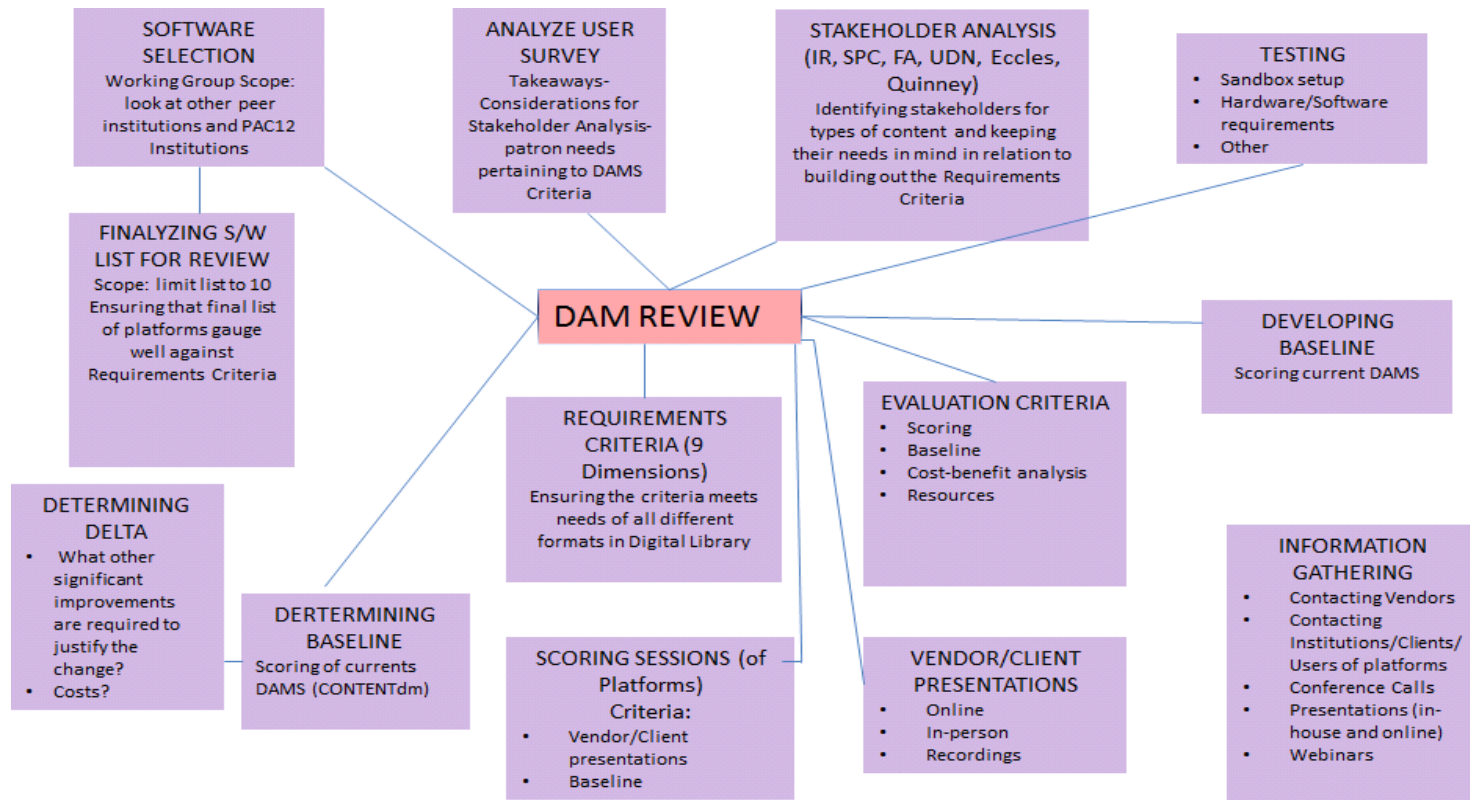
The screenshot shows the SIMP tool interface with a navigation bar at the top containing 'Browse Servers', 'Assess Packages', 'Admin', 'Queue (0)', and 'Sandbox'. Below the navigation bar is a toolbar with options like 'Invert', 'Select all', 'Select without ARK', 'Select unedited', 'Select unsert', 'Select unapproved', 'Select cancelled', and 'Select none'. A dropdown menu is open, showing options: 'Set Collection', 'Create ARKs', 'Edit Metadata', 'Approve', 'Download Metadata', 'Select Archival Destination', and 'Queue for Ar...'. The main content area displays a table with the following columns: Package Name, Title, Collection, Last Editor, Approved By, ARK, and Archive Status. The table contains four rows of data, each with a checkbox in the first column.

Package Name	Title	Collection	Last Editor	Approved By	ARK	Archive Status
<input type="checkbox"/> 252600103_00oi3hep	Watercolor Southwest fifth an...	uum_wfws	u0035221	u0751700	ark:/87278/s6r5gff	Queued by u0751
<input type="checkbox"/> 252600105_01oi3hep	41st Annual exhibition of the ...	uum_wfws	u0035221	u0751700	ark:/87278/s6r04qrg	Queued by u0751
<input type="checkbox"/> 252600108_02oi3hep	Western Federation of Waterc...	uum_wfws	u0035221	u0751700	ark:/87278/s6r7401j	Queued by u0751
<input type="checkbox"/> 252600109_03oi3hep	17th annual exhibition of the ...	uum_wfws	u0035221	u0751700	ark:/87278/s6cg37b8	Queued by u0751

More details available in D-Lib article:

<http://www.dlib.org/dlib/july14/neatrou/07neatrou.html>

DAMS Review in 2013



DAMS Review in 2013

CONTENTdm®

CHRONICLING AMERICA
Historic American Newspapers

MDID

ExLibris
Rosetta

hydra

EQUELLA®
PEARSON

XTF
eXtensible Text Framework

omeka

Cumulus

bepress™

ARCHIVES WEST

ORBIS
CASCADE
ALLIANCE

DAMS Review - requirements criteria

Patron ease of use

- End-user experience
- Search options and accuracy - discoverability of the content
- Handle all formats in similar fashion for all browsers
- ADA compliance

Types of content supported

- Major content categories (e.g. IR, newspapers, EAD)
- File types and datasets
- Tiers of content (both object and item level)
- Media streaming

Issues related to ingest/conversion/exit

- Workflows for adding new content
- Converting existing collection data
- Barrier(s) to exit

Collection administration

- Interface design
- User permissions
- Website configuration
- Statistics/Reporting/Logs

Metadata administration

- Metadata creation, editing, and maintenance options
- Faceting
- Copyright/Embargo
- Search Engine Optimization (SEO)

Integration with other library platforms

- Discovery layer (e.g. Primo)
- Digital preservation system (e.g. Rosetta)
- Locally developed tools (e.g. SIMP Tool)

Technical infrastructure/administration

- Scalability of collections/content
- Hardware/Server(s) specs
- API support
- System and server installation, configuration, and upgrades
- Internal resources required to run the system

Technical support

- Training
- Help desk

Future and strategic directions

DAMS Review Outcome - Solphal



Hardware Requirements - CONTENTdm vs Solphal

CONTENTdm

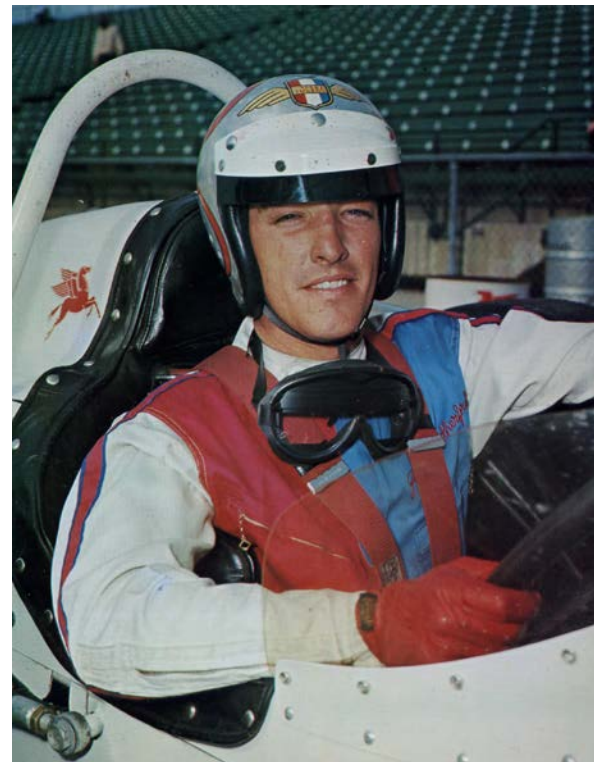
- 2 servers (UDN & Digital Collections)
- Digital Collections (2x12 Core 3.0 Ghz, 64 Gb mem) UDN (2x8 Core 2.4 Ghz, 96 Gb mem)
- Scalability issues
- Limited customizations

Solphal

- 3 VMs (indexing services, UDN, and Digital Collections)
- VMs avg. 2 cores, 3 Gb mem
- Extremely small footprint (hardware and power savings)
- Highly scalable and sustainable
- Fully customizable
- Easy replication and cloud-centric

Benefits of Solphal

- In-house expertise and support
- Student, patron, and partner convenience
 - faster response times
 - advanced search functions
 - front-end metadata editing
 - customized interface
- Substantial power, hardware, and licensing cost savings
- Improved workflows and QA/QC for all teams
- Staff time savings = ~1 less FTE supporting servers
- Demonstrating and sharing open source solutions with other institutions



Indexing Improvements

Utah Digital Newspapers

- 55 GB of metadata
- 21,648,462 records
- CONTENTdm
 - Full re-index ~ 1440 hrs (site is online)
 - Full re-index ~ 240 hrs (site is offline)
- Apache Solr indexing
 - Initial index ~ 2.75 hrs
 - Incremental index ~ instant

Digital Collections

- 6 GB of metadata
- 2,248,922 records
- CONTENTdm
 - Full re-index ~ 144 hrs (site is online)
 - Full re-index ~ 72 hrs (site is offline)
- Apache Solr indexing
 - Initial index ~ 25 min
 - Incremental index ~ instant

User Interface Improvements

Utah Digital Newspapers

- CONTENTdm
 - Page load times (avg) 10s
 - Pdf display issues
- Solphal
 - Page load times (avg) under 500ms

Name	Status	Type ▲	I...	Size	Time	Waterfall	40.00 ms
<input type="checkbox"/> analytics.js	307		...	0 B	57 ms		
<input checked="" type="checkbox"/> search?page=3	200	docu...	...	9.0 KB	48 ms		
<input type="checkbox"/> cJZKeOuBrn4kERx...	200	font	...	20.8 KB	35 ms		
<input type="checkbox"/> MTP_ySUJH_bn48...	200	font	...	21.5 KB	31 ms		
<input type="checkbox"/> k3k702ZOKiLJc3W...	200	font	...	21.6 KB	41 ms		
<input type="checkbox"/> fontawesome-webfo...	200	font	...	65.4 KB	20 ms		
<input type="checkbox"/> 0d55f26291d87846...	200	jpeg	...	3.9 KB	8 ms		
<input type="checkbox"/> 0ba4e1d772b4c77d...	200	js	...	1.3 KB	9 ms		
42 requests 303 KB transferred Finish: 405 ms DOMContentLoaded: 264 ms Load: 382 ms							

Digital Collections

- CONTENTdm
 - Page load times (avg) 5s
 - Pdf display issues
- Solphal
 - Custom HTML5 image viewer
 - HTML response times (avg) under 50ms
 - Complete page load times (avg) under 500ms

Sample Solr Ingest File



```

<add>
<doc>
<field name="title_t">U Archives D. Art 1890-1939 fd 1
#2</field>
<field name="form_t">photograph</field>
<field name="source_t">University of Utah Archives</field>
<field name="work_id_t">101</field>
<field name="date_digital_t">4/20/2010</field>
<field name="rights_t">Digital Image Copyright 2010,
University of Utah. All Rights Reserved.</field>
<field name="type_t">Image</field>
<field name="imaging_technician_t">Amelia Walchli</field>
<field name="metadata_cataloger_t">Amelia Walchli</field>
<field name="file_name_t">101.tif</field>
<field name="ark_t">ark:/87278/s6sb7cp8</field>
<field name="archival_file_t">Volume1/U Archives D. Art
1890-1939 fd 1 #2.tif</field>
<field name="created_tdt">2010-04-19T00:00:00Z</field>
<field name="modified_tdt">2010-04-26T00:00:00Z</field>
<field name="oldid_t">Art2 0</field>
<field name="id">15729</field>
<field name="parent_i">0</field>
<field
name="thumb_s">/68/84/6884a28421c31d96d4d9ec466f47fecbb99af
700.jpg</field>
<field
name="file_s">/5c/bc/5cbbc0793020d24aba7eb6e4443d0c6574970ac
57.jpg</field>
<field name="format_t">image/jpeg</field>
<field name="setname_s">uu_aah_artpr</field>
<field name="restricted_i">0</field>
</doc>
<doc>
<field name="title_t">U Archives D. Art 1890-1939 fd 1
#4</field>
<field name="form_t">photograph</field>
<field name="source_t">University of Utah Archives</field>
<field name="work_id_t">102</field>

```

UDN migration vs. Digital Collections migration

Utah Digital Newspapers

- Newspapers metadata more standardized, but not perfect
- Inconsistencies with titles, dates, paper names, and type fields
- Clean-up for nonstandard characters, newspaper names issues
- Previous architecture had one newspaper title split into multiple collections (scalability issues)
- Consistent field names and metadata meant that migration happened sooner and faster
- No external partners to contact

Digital Collections

- More communication needed with both internal and external partners during migration
- Problem or missing metadata values in older collections not fixed (yet)
- Field label standardization
- Standardization of type and format
- Lots of clean-up work still to do in the future

Metadata issues: Corrections

Metadata Standardization

Establish core fields needed for faceting and queries in new DAM, and change varying fields to the following:

- Creator

Title	Mr. J. Holman Waters: Recollections of Samuel Newhouse, Salt Lake City, Utah: an interview by Hynda Rudd, July 16, 1977
-------	---

- Date

Creator	Waters, J. Holman, 1912-1995
---------	------------------------------

- Subject

Date	1977-07-16
------	------------

- Rights

Spatial Coverage	Salt Lake City, Salt Lake County, Utah, United States
------------------	---

- Spatial Coverage

Subject	Newhouse, Samuel, 1853-1930; Businessmen--Utah--Salt Lake City--Interviews; Jews--Utah--Salt Lake City
---------	--

- Type

Type	Text
------	------

- Title

Rights	Digital Image © 2016 University of Utah. All Rights Reserved. Contact the J. Willard Marriott Library Manuscripts Division for use and restrictions. 801-585-3082
--------	---

Metadata fields gone wild!

About the Art
 About the Artist
 Abstract
 Accession number
 Accession Number
 Access restrictions
 Access Restrictions
 Access rights
 Accompanying Material
 Acoustic Zone
 Added Title
 Added title 2
 Additional information
 Additional Information
 Additional Resources
 Additional notes
 Address
 Affiliation
 Ages
 Alt # 1
 Alt # 2
 Alternate Name(s)
 Alternate title
 AlternateTitle
 Alternate Title
 Alternative formats available
 Alternative Formats Available
 Alternative title
 Amendments and updates
 Anatomy
 Annotation
 Archival file
 Archival Resolution
 ark
 ARK
 Article Title
 Article Title(s)
 Artist
 Artist/Manufacturer
 Artist's Notation
 Athlete's Name
 Audience

Audio Clip Instructions
 Author
 Author/Editor
 Author/Editor Bio
 Author(s)
 AV Item Number
 Awards
 A-Z assignment
 Band
 Banner
 Batch
 Batch #
 Batch and Box #
 Batch number
 bibliographicCitation
 Bibliographic Citation
 Binding
 Birth Date
 Birthplace
 Bit depth
 Bit-depth
 Bit Depth
 Box and Folder Number
 browse order
 Building
 Business/building names
 B/W Illustrations
 Calendar
 Calendar Month
 Call Number
 Camp
 CA+P Accession No.
 CA+P Course
 Caption
 Caption on slide
 Cataloged by
 Cataloger
 Catalog Number
 Catalog Transcription
 Catalogue
 Catalogued By
 Category

CDM 5 URL
 Century
 Children of Deceased
 citatation_issn
 Citation
 citation_author
 citation_conference_title
 citation_date
 citation_dissertation_institution
 citation_dissertation_name
 citation_doi
 citation_firstpage
 citation_inbook_title
 citation_isbn
 citation_issn
 citation_issue
 citation_journal_title
 citation_keywords
 citation_language
 Citation_lastpage
 citation_other_author
 citation_publisher
 citation_technical_report_institution
 citation_technical_report_numbe
 citation_title
 citation_volume
 City
 Class
 Classes
 Classification
 Click here for an immersive experience!
 Click here for a 'page-fig' view
 Click here for details
 Click here to go to AFRC 2012 Winter Conference
 Materials
 Click here to go to link
 Click here to view photo set!
 Click to Play
 Clinical
 Clinical Signs

Cloth Discount
 Cloth ISBN
 Cloth Price
 Cohort Number
 Collection
 Collection aliases
 Collection compiler
 Collection Compiler
 Collection contact information
 Collection information
 Collection Information
 Collection, Is part of
 Collection Name
 Collection Name and Number
 Collection number
 Collection Number
 Collection number and name
 Collection Number and Name
 Collection Owning Institution
 Collection type
 Color Illustrations
 Comment
 Comments
 Commissioned By
 Common Name
 Company
 Company/Business
 Complete Catalog
 Completion Date
 Compressed file editing softwar
 Compressed File Extent
 Compressed file operating systs
 Compressed file quality
 Compressed file size
 Compression
 Conference
 Contact information
 CONTENTdm file name
 CONTENTdm file name v.5
 CONTENTdm file path v.5
 CONTENTdm number
 CONTENTdm number v.5

Context
 Context URL
 Contributing Institution
 Continent
 Contrib. Institution
 Contributing Institution
 Contributing Institution
 Contributing Organization
 Contributor
 Contributor Primary
 Contributor Primary
 Contributor Secondary
 Conversion specifications
 ConversionSpecifications
 Conversion Specifications
 Copy ID
 Copyright
 Copyright Date
 Copyright notice
 Corporate name
 Corporate Name
 Country
 County
 County Name
 Coverage
 Coverage spatial
 Coverage-spatial
 Coverage Spatial
 Coverage-Spatial
 Coverage - Temporal
 Coverage-Temporal
 Covrage-spatial
 Creation Date
 Creation methodology
 Creation Methodology
 Creator
 Creator Dates
 Creator Nationality
 Creator of Media Recording
 Creator(s)/Author(s)
 Credit Line
 Culture
 Current address
 Current Address
 Curriculum
 Data Description
 Date
 Date created
 Date-Created
 Date created v.5

Date Delivered
 Date digital
 Date.digital
 Date Digital
 Date-Digital
 Date.Digital
 Date.Earliest
 Date Entered
 Date issued
 Date.Latest
 Date modified
 Date modified v.5
 Date of photograph
 Date of Photograph
 Date.original
 Date Original
 Date-Original
 Date.Original
 Date Original DF
 Date or Period
 Date Scanned
 DC.citation.epage
 DC.citation.issue
 DC.citation.spage
 DC.citation.volume
 DC.relation.ispartof
 Death Date
 Deathplace
 Deceased Age
 Deceased NameDegree
 Degree Granting Institution
 Department
 Department email
 Department name
 Depth (3D Objects)
 Description Anecdotal
 Description
 Description2
 Dewey Decimal Number
 Digital Archive
 Digital Collection
 Digital File Location
 Digital Format
 Digitization Specification
 Digitization specifications
 Digitization Specifications
 Digitization Specs
 Digitized by
 Digitizing Device
 DigitizingTechnician
 Dimensions

Full NatureServe Report
 Full resolution
 Full Resolution 2
 Full resolution folder path
 Full resolution v.5
 Full test
 Full Text
 Full Text
 Full text field
 Full Text Field
 Full Text Search
 Full Transcript
 Function
 Funding
 Further InFunding/Fellowship
 formation
 Game Website
 Gender
 Genre
 Genre (AAT)
 Genre or Form
 Genus
 Geographical names
 Geographical Names
 Geographic coordinates
 Geographic Coordinates
 Geographic Location
 Geo-locale
 Geopolitical place
 Get Media
 Global Positioning System Coordinat
 Grade Level
 Habitat Type
 Has Part
 Height, Framed
 Height Unframed
 Hidden Description
 Historic address
 Historic Address
 Historic place name
 Historic Place Name
 History
 Holding institution
 Holding Institution
 Holding.Institution
 Holding Location
 Hosting institution
 ID
 Identifier
 Image Capture

Variations in title field name

Collection Alias	Local Field Name	CONTENTdm nickname
col/ehsl-wht	Title	title
col/epubs	Article Title	articl
col/fhwa	Document Title	title
col/fitz	Title	title
col/flwright-jp2	Alternative Title	latin
col/flwright-jp2	Title	title
col/GBA_Photos	Caption	title
col/GBM	Caption	title
col/gis	Title	title

Controlled Vocabularies

Type (DCMI Type vocab)

- Collection
- Dataset
- Event
- Image
- Image/MovingImage
- Image/StillImage
- InteractiveResource
- PhysicalObject
- Service
- Software
- Sound
- Text

Format (Internet Media Type)

- application/msword
- application/pdf
- application/vnd.google-earth.kmz
- application/vnd.ms-powerpoint
- application/xml
- application/x-shockwave-flash
- application/zip
- audio/mpeg
- image/jpeg
- image/png
- text/html
- video/mp4

Language (ISO 639-2)

- ara
- chi
- eng
- fre
- ger
- heb
- ita
- kor
- lat
- nav
- rus
- spa

Delete Unneeded Legacy Collections



Home Browse All Ask a Question

Search within results [Search](#) [Advanced Search](#)

Please take a moment to fill out our survey

Browsing items in: Univ of Utah - Career Services Library

Sort by: [Title](#) [Display Options](#) [Save to favorites](#)

Display: [100](#)

Narrow your search by:

- ▶ Creator
- ▶ Date Digital
- ▶ Subject
- ▶ Type

<input type="checkbox"/> Thumbnail	Title	Description	Subject	Collection
	- 90 THINGS TO DO BEFORE U JOIN THE REAL WORLD	How do you get a job without experience and get experience without a job? It's the question virtually every college student or recent graduate faces. In Getting from College to Career, Lindsey Pollak offers the first definitive guide to building...	JOB SEARCH	Univ of Utah - Career Services Library
	10 THINGS EMPLOYERS WANT YOU TO LEARN IN COLLEGE	A college diploma can open many doors, but it's just an expensive piece of paper if you don't have what employers seek. Long-time professor and student adviser Bill Coplin surveyed the nation's top companies and identified the essential skills...	CAREER PLANNING	Univ of Utah - Career Services Library
	100 BEST CAREERS FOR WRITERS AND ARTISTS	What and where the jobs are for people with creative talents! For all the aspiring writers and artists who want to put their creative talents to good use, here's the guide that can show them how! Compiled by one of America's leading career...	WRITING	Univ of Utah - Career Services Library

Future metadata corrections - next steps

Review 441 fields manually, noted issues (field used in only one collection, field synonyms)

Develop spreadsheet to cluster possible fixes by partner, write up metadata recommendations - ongoing process

To do:

- Explore possibilities of assessment scripts against solr to review metadata values
- Explore visualization tools



Future metadata corrections - Rights statements

40867	<u>This material may be protected by copyright. Permission required for use in any form. For further information please contact the Multimedia Archives, Special Collections, J. Willard Marriott Library, University of Utah.</u>
20207	<u>http://creativecommons.org/licenses/by-nc-sa/1.0/</u>
5134	<u>Digital Image Copyright 2008, University of Utah. All Rights Reserved.</u>
4325	<u>Digital Image Copyright 2010, University of Utah. All Rights Reserved.</u>
3597	<u>Copyright owner unknown</u>
3583	<u>Digital image copyright 2005, University of Utah. All rights reserved.</u>
3488	<u>Digital image, copyright 2003 Uintah County Library</u>
3405	<u>This material is protected by copyright. Express permission is required for use in any form. For further information please contact the Multimedia Archivist, Special Collections, J. Willard Marriott Library, University of Utah.</u>
3033	<u>This material may be protected by copyright. Permission required for use in any form. Please contact the Multimedia Archives, Special Collections, J. Willard Marriott Library, University of Utah.</u>
2975	<u>This material is protected by copyright. Permission required for use in any form. For further information please contact the Multimedia Archives, Special Collections, J. Willard Marriott Library, University of Utah.</u>
2616	<u>Digital Image Copyright 2007, University of Utah. All Rights Reserved.</u>

Future metadata corrections - MWDL Application Profiles

title	date	description	subject	type	format	rights
National Ski Association officers and directors	January 13 - 15, 1961	Photo shows National Ski Association	Melville, Alton Crane, 1961	Image	image/jpeg	This material may be protected by copyright.
Group Picture in the Orderville Ward				Image	image/jpeg	This material may be protected by copyright.
Saltair Beach Pavilion and bathers, Saltair Resort.		1893-1925 (destroyed by fire)		Image	image/jpeg	This material may be protected by copyright.
Interior of the Dancing Pavilion, Saltair Resort.		1893-1925 (destroyed by fire)		Image	image/jpeg	This material may be protected by copyright.
Saltair Beach Pavilion, Saltair Resort.		1893-1925 (destroyed by fire)		Image	image/jpeg	This material may be protected by copyright.
Group of ski tourers high in the Wasatch mountains		A group photo of ski tourers in the	Wasatch Mountains (Utah)	Image	image/jpeg	This material may be protected by copyright.
Painting of soldiers.					image/jpeg	This material may be protected by copyright.
George Thompson in England.				Image	image/jpeg	This material may be protected by copyright.
George Thompson with second wife Katherine.				Image	image/jpeg	This material may be protected by copyright.
William Jennings Bryan at the radio station.					image/jpeg	
Nels Just with Emma Bennett Just				Image	image/jpeg	This material may be protected by copyright.
Emma Bennett Just's son Fred Bennett.				Image	image/jpeg	This material may be protected by copyright.
Charley and James Just				Image	image/jpeg	This material may be protected by copyright.
Nels Just				Image	image/jpeg	This material may be protected by copyright.
Thomas Moran				Image	image/jpeg	This material may be protected by copyright.
Just family by their ranch house				Image	image/jpeg	This material may be protected by copyright.
Francis and Will Just				Image	image/jpeg	This material may be protected by copyright.
Emma Bennett Just at age 16.				Image	image/jpeg	This material may be protected by copyright.

Future metadata corrections - Subject faceting

Topic	
American newspapers	1
Antisemitism	12
Auschwitz (Concentration camp)	1
Bamberger Railroad Company	2
Bar mitzvah	1
Cantors (Judaism)	1
Conservative Judaism	1
Eastern Front (World War (1914-1918))	1
Emigration and immigration	3
Ethnic groups	1
Evacuation and relocation of Japanese Americans (United States : 1942-1945)	1

Roadmap for future development

Solphal (Front end) development

- International Image Interoperability Framework (IIIF)
- RDFa and schema.org support

SIMP Tool enhancements

- Workflow automation
- Large updates monthly, small updates as needed

Large projects

- IMLS Grants
 - Newspapers in Hydra (LG-70-17-0043-17)
 - Western Name Authority File (LG-72-16-0002-16)
- Born digital content
- Partner projects
- Data Repository





People

Platforms

Processes

Lessons Learned

Wild wild west of metadata wrangling



Shooting of Patrick Coughlin

<https://collections.lib.utah.edu/details?id=962118>

Don't keep shoveling
while it is still snowing!



Unidentified man holding snow shovel in front of his house, (family, friend or acquaintance of Norman D. Nevills).

<https://collections.lib.utah.edu/details?id=984034>

Thank You!

Contact us at:

Jeremy Myntti (jeremy.myntti@utah.edu)

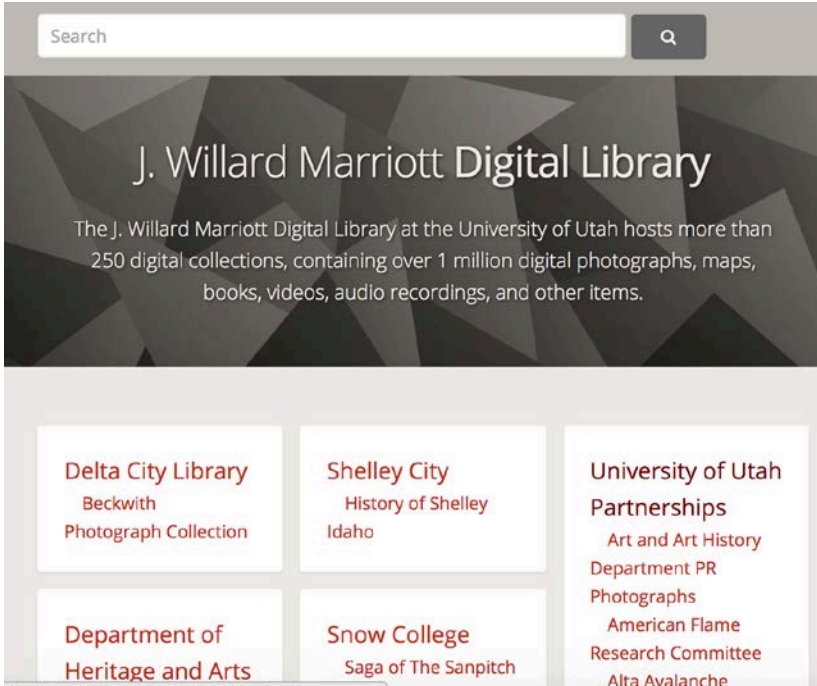
Anna Neatrour (anna.neatrour@utah.edu)


Harish Maringanti (harish.maringanti@utah.edu)

Brian McBride (brian.mcbride@utah.edu)

Alan Witkowski (alan.witkowski@utah.edu)

Matt Brunsvik (matt.brunsvik@utah.edu)



Search 

J. Willard Marriott Digital Library

The J. Willard Marriott Digital Library at the University of Utah hosts more than 250 digital collections, containing over 1 million digital photographs, maps, books, videos, audio recordings, and other items.

<p>Delta City Library Beckwith Photograph Collection</p>	<p>Shelley City History of Shelley Idaho</p>	<p>University of Utah Partnerships Art and Art History Department PR Photographs American Flame Research Committee Alta Avalanche</p>
<p>Department of Heritage and Arts</p>	<p>Snow College Saga of The Sanpitch</p>	

<https://collections.lib.utah.edu/>
<https://newspapers.lib.utah.edu/>